Wireless Base Station 11g



Instructions for use









AQ95-56F-525-PF (report No.)

DECLARATION OF CONFORMITY

We, Philips Consumer Electronics, BLC P&A CC: Building SBP6 (manufacturer's name)

P.O.Box 80002, 5600 JB Eindhoven, The Netherlands (manufacturer's address)

declare under our responsibility that the radio product:

Philips (name)

CPWBS054/00, (type or model)

Wireless Base station 11G (product description)

to which this declaration relates is in conformity with the following standards:

EN 300 328 -1 v1.3.1 (2001-12) EN 300 328-2 v1.2.1 (2001-12) EN 301 489-1 (2002-08) EN 301 489-17 (2002-08) IEC 60950 :2000

(title and/or number and date of issue of the standards)

following the provisions of 1999/5/EC (R&TTE Directive)

Eindhoven, 9 February 2004 (place, date)

P.Frantzen. // Jumps General Approbations Manager (signature, name and function

English

Hereby, Philips Consumer Electronics, BLC P&A CC, declares that this CPWBS054 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Finnish

Philips Consumer Electronics, BLC P&A CC vakuuttaa täten että CPWBS054 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Dutch

Hierbij verklaart, Philips Consumer Electronics, BLC P&A CC dat het toestel CPWBS054 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

French

Par la présente, Philips Consumer Electronics, BLC P&A CC, déclare que l'appareil CPWBS054 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE

Swedish

Härmed intygar, Philips Consumer Electronics, BLC P&A CC, att denna CPWBS054 står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Danish

Undertegnede Philips Consumer Electronics, BLC P&A CC erklærer herved, at følgende udstyr CPWBS054 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF

German

Hiermit erklärt Philips Consumer Electronics, BLC P&A CC die Übereinstimmung des Gerätes CPWBS054 mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG.

Greek

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Πθιμιπτ Γοξτφνεσ Εμεγυσοξίγτ, Β.Φ. Πεσιπθεσαμτ & Αγγεττοσίετ ΤΗΛ ΥΝΕΙ ΟΤΙ ΓΠΨΦΑ054 ΣΥΜΜΟΡΦ ΥΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙ ΥΤΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΤΙΑΤΑΞΕΙΣ ΤΗΣ ΟΤΗΓΙΑΣ 1999/5/

Italian

Con la presente Philips Consumer Electronics, BLC P&A CC dichiara che questo CPWBS054 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Spanish

Por medio de la presente, Philips Consumer Electronics, BLC P&A CC, declara que el CPWBS054 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE

Portuguese

Philips Consumer Electronics, BLC P&A CC declara que este CPWBS054 está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

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Italia

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Cyprus

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CPWBS054/00

R&TTE Directive 1999/5/EC

Nederland

053 482 9800

Norge

22 70 82 50

Österreich

01 5465 75603

Portugal

0800-831-363

Schweiz/Suisse/Svizzera

02 2310 2116

Suomi

09 2290 1903

Sverige

08 632 0016

UK (United Kingdom)

0207 949 0069

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Wireless Base Station 11g

CPWBS054

Thank you for purchasing the Philips Wireless Base Station 11g. This Wireless Base Station 11g is a 54 Mbps wireless residential gateway, especially designed to provide a simple and cost effective wireless Internet sharing solution for both home and small office users.

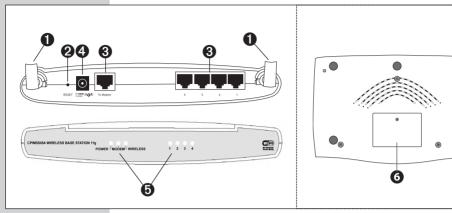
Besides flexibility on home network connectivity, the Wireless Base Station 11g also provides network security and management features for users like Network Address Translation (NAT), Dynamic Host Configuration Protocol (DHCP), advanced packet filtering with hacker attack monitor, logging and stateful packet inspection (Firewall-SPI). Also, Universal Plug and Play (UPnP), Dynamic DNS (DDNS), WiFi Protected Access (WPA), 802.1x + TKIP, and wireless to wired Ethernet bridging are all supported.

Packaging contents

Please check whether all of the following items are present in the box of the Wireless Base Station 11g. These are provided to help you set up and use your Wireless Base Station 11g. Contact your Philips retailer if any items are missing.

- Wireless Base Station 11g
- Power adapter
- Ethernet cable class RJ-45
- Installation CD
- "How To...?"-booklet.

Your Wireless Base Station 11g



1 Antennas

For connecting to your Wireless Network Adapters (also called WLAN or WiFi).

2 Reset button

- Press it for 2 seconds to reboot the wireless base station 11g.
- Keep it pressed for more than 5 seconds to restore the factory default settings.

3 Ethernet ports

RI-45 sockets for Broadband Modem and Ethernet network cables.

4 Power

Socket for connecting the power adapter to the Wireless Base Station 11g.

5 Indicator LEDs

Display the network status.

LED	LED colour	Meaning		
Power	Blue	Off when power is disconnected		
		On when receiving power.		
		Blinking when rebooting		
Wireless		Off when wireless is disabled.		
(Wireless	Blue	On when wireless enabled and client active.		
home network)		Blinking when transmitting.		
Modem	Blue	Off when not connected		
(Internet modem)		On when a link is established.		
		Blinking when transmitting.		
1/2/3/4 LAN	Yellow (10 Mbps)	Off when not connected		
(Wired home network)	Blue (100 Mbps)	On when a link is established.		
		Blinking when transmitting.		

6 Label with MAC address

Important information

- Please install and connect the product in the order as described in the "How to..." booklet only. This assures best installation results with the least technical bassles.
- Please read this manual and the "How To...?"-booklet carefully before using the Wireless Base Station 11g; and keep these documents for future reference.
- The most recent downloads and information on this product will be available through our web site www.philips.com/support
- During set-up and installation, it may be helpful to have the instructions for your PC and other network components at hand.

Safety Precautions

- Check if the voltage indicated on the type plate of the adapter corresponds to the local mains voltage before connecting to the mains power supply.
- Radio equipment for wireless applications is not protected against disturbance from other radio services.
- Do not expose the product to excessive moisture, rain, sand or heat sources.
- The product should not be exposed to dripping or splashing. No object filled with liquids, such as vases, should be placed on the product.
- Keep the product away from domestic heating equipment and direct sunlight.
- Allow a sufficient amount of free space all around the product for adequate ventilation.
- Do not open this product. Contact your Philips retailer if you experience technical difficulties.

Environmental information

All redundant packing material has been omitted. We have done our utmost to make the packaging easily separable into three mono materials: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet). Your set consists of materials that can be recycled if disassembled by a specialised company. Please observe the local regulations regarding the disposal of packing materials, exhausted batteries and old equipment.

Disclaimer

This product is provided by "Philips" "as is" and without any express or implied warranty of any kind of warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed.

In no event shall Philips be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of information, data, or profits; or business interruption) howsoever caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of inability to use this product, even if advised of the possibility of such damages.

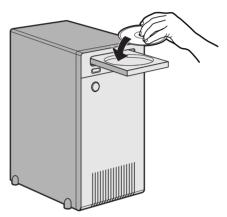
Philips further does not warrant the accuracy or completeness of the information, text, graphics, links or other items transmitted by this product.



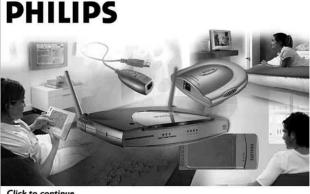
Installing the Wireless Base Station

Install the Wireless Base Station 11g software from the Installation CD and use the "How to..?" booklet to help you install and configure the Wireless Base Station 11g. Please, do not make any hardware connections before the Setup Wizard asks you to do so.

- 1 Place the CD included in the box in your computer's drive and start installing the software.
 - > The CD should start automatically. If it does not, please double-click "My Computer", then the drive icon and finally "Setup.exe" to start the CD.



2 Follow the on-screen instructions for setting up your Wireless Base Station 11g.



Click to continue

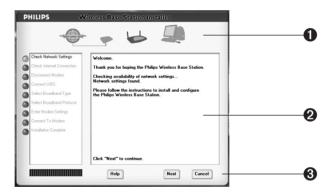
3 In the installation program, look for the picture of the Wireless Base Station 11g on the screen and click on it to continue the installation procedure.

How to use the Setup program

The Setup program will assist you in making the hardware connections for your Wireless Base Station 11g in the correct order. It will also attempt to detect your existing network and Internet settings and apply them to the new situation.

For easy installation of your Wireless Base Station 11g, please follow the on-screen instructions.

- 1 Graphical representation of your network, the network connections, and their status. Unavailable components will be 'blue' and only the available connections will be indicated in green.
- 2 Text window that provides you with information on status and on what to do next.
- 3 Control buttons for navigating the Setup program



This concludes the installation procedure. Please see the following sections on connecting, configuring and using the Wireless Base Station 11g.

Should there appear any error messages or requests for additional information on the screen, then please read the manual and the "Troubleshooting" section. With the information given in this manual, you should be able to solve many problems with installing and using the Wireless Base Station 11g.

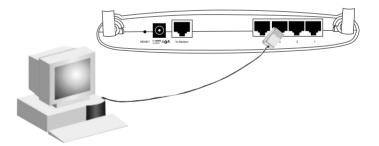
Please visit our web site www.philips.com/support if you need further assistance. Or, call our help desk for assistance. The help desk telephone numbers can be found on the opening pages of this manual.

How to create a wired network using Ethernet cables

The Ethernet ports will adapt automatically to the connected cable type. This means you can use either type of Ethernet cable, straight-through or crossover, provided it is Category 5 or higher quality. The four Local Network ports 1, 2, 3 and 4 on the Wireless Base Station 11g will automatically negotiate the connection speed to 10 Mbps Ethernet or 100 Mbps Fast Ethernet, and the transmission mode to half duplex or full duplex.

Use twisted-pair cable to connect any of the four Local Network ports 1, 2, 3, and 4 on the Wireless Base Station 11g to an Ethernet adapter on your PC. Otherwise, you can cascade any of the Local Network ports 1, 2, 3, and 4 on the Wireless Base Station 11g to an Ethernet hub or switch, and then connect your PC or other network equipment to the hub or switch. When inserting an RI-45 plug, be sure the tab on the plug clicks into position to ensure that it is properly seated.

Do not plug a phone jack connector into any RI-45 port. This may damage the Wireless Base Station 11g. Instead, use only twisted-pair cables with RI-45 connectors.



How to create a wireless network

For an example, see the chapter on "How to set-up a computer network" at the end of this manual.

Install a wireless network adapter in each computer that will be connected to the Internet or your local network via radio signals. Philips currently offers several wireless network adapters, including the Philips Wireless USB Adapter and the Philips Wireless Notebook Adapter.

Rotate both antennas on the back of the Wireless Base Station 11g to the desired position. For more effective coverage, position antennas along

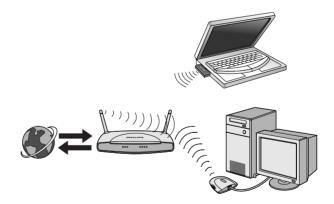
Warning:

different axes; for example around 45 to 90 degrees apart. Try to place the Wireless Base Station 11g in a position that is located in the center of your wireless network. Normally, the higher you place the antenna, the better the performance. Ensure that the Wireless Base Station's location provides optimal reception throughout your home or office.

Computers equipped with a wireless adapter can communicate with each other as an independent wireless Local Network by configuring each computer to the same radio channel. However, the Wireless Base Station 11g can provide access to your wired/wireless Local Network or to the Internet for all wireless workstations. Each wireless PC in this network infrastructure can talk to any computer in the wireless group via a radio link, or access other computers or network resources in the wired Local Network infrastructure or over the Internet via the Wireless Base Station 11g.

The wireless infrastructure configuration not only extends the accessibility of wireless PCs to the wired Local Network, but also increases the effective wireless transmission range for wireless PCs by retransmitting incoming radio signals through the Wireless Base Station 11g.

A wireless infrastructure can be used for access to a central database, or for connection between mobile workers, as shown in the following figure:



Making the Wireless Local Network Connections

Instaling and Configuring TCP/IP

If you have not previously used Internet or installed a computer network on your PC, refer to the following section.

Installing TCP/IP

Windows 98SE/Me/2000 and XP

Click Start/Help, and seach for the text "TCP/IP". Select the subject on "Installing Network Protocols" and follow the instructions the Windows Help function gives you.

Set the TCP/IP protocol you are installing to DHCP for dynamically allocating IP-addresses within the network. Use the Windows Help function if you need more information.

Re-run the Setup program from the Installation CD after installing the TCP/IP-protocol.

Configuring a Macintosh Computer

DHCP IP Configuration

- 1. Pull down the Apple Menu. Click Control Panel and select TCP/IP.
- 2. In the TCP/IP dialog box, make sure that Ethernet is selected in the Connect via: field.
- 3. Select Using DHCP Server in the Configure field.
- 4. Close the TCP/IP dialog box.

The Wireless Base Station 11g can be configured using Internet Explorer (version 5.5 or higher or Netscape (version 4.7 or higher). Using the web management interface, you can configure the Wireless Base Station 11g and view statistics to monitor network activity.

Note:

Before you attempt to configure your Wireless Base Station 11g, if you have access to the Internet please visit www.philips.com/support and download the latest firmware update to ensure your Wireless Base Station 11g is running the latest firmware version.

Before you attempt to log into the Wireless Base Station's web-based Settings, please verify that you have disabled any firewall or security software that may be running.

Disable Proxy Connection

You will also need to verify that the HTTP Proxy feature of your web browser is disabled. This is so that your web browser will be able to view the Wireless Base Station 11g configuration pages. The following steps are for Internet Explorer. Determine which browser you use and follow the appropriate steps.

Adapting your browser configuration for: Internet Explorer (5 or above)

- 1. Open Internet Explorer. Click Tools, and then select Internet Options.
- 2. In the Internet Options window, click the Connections tab.
- 3. Click the LAN Settings button.
- Clear all the check boxes and click OK to save these Local Area Network settings.
- 5. Click OK again to close the Internet Options window.
- 6. Restart Internet Explorer for the changes to take effect.

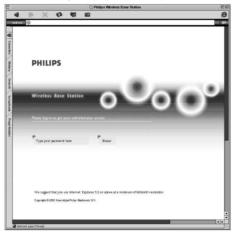
Adapting your browser configuration for: Internet Explorer (for Macintosh)

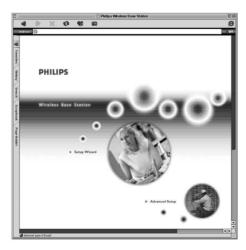
- 1. Open Internet Explorer. Click Explorer/Preferences.
- 2. In the Internet Explorer Preferences window, under Network, select Proxies.
- 3. Uncheck all check boxes and click OK.

Accessing the Wireless Base Station setting menus

To access the Wireless Base Station's management interface, enter the Wireless Base Station IP address in your web browser http://192.168.2.1. Then click LOGIN. (By default, there is no password.)

The home page displays the Setup Wizard and Advanced Setup options.





Navigating the Web Browser Interface

The Wireless Base Station's management interface features a Setup Wizard and an Advanced Setup section. Use the Setup Wizard if you want to quickly set up the Wireless Base Station 11g for use with a cable modem or DSI modem.

Advanced setup supports more advanced functions like hacker attack detection, IP and MAC address filtering, intrusion detection, virtual server setup, virtual DMZ hosts, and other advanced functions.

Making Configuration Changes

Configurable parameters have a dialog box or a drop-down list. Once a configuration change has been made on a page, be sure to click the APPLY or NEXT button at the bottom of the page to enable the new setting.

To ensure proper screen refresh after a command entry, ensure that Internet Explorer 5.0 is configured as follows: Under the menu Tools/ Internet Options/General/Temporary Internet Files/Settings, the setting for "Check for newer versions of stored pages" should be "Every visit to the page."

Note:

Setup Wizard

If you completed the Setup Wizard from the Installation CD, you do not need to change any of these settings. Go to 'Advanced Setup' for managing the Wireless Base Station 11g.

Time Zone

Click on the Setup Wizard picture. The first item in the Setup Wizard is Time Zone setup.

For accurate timing of client filtering and log events, you need to set the time zone. Select your time zone from the drop-down list, and click NEXT.



Broadband Type

Select the type of broadband connection you have, Cable Modem or ADSL. See the following pages for details on the connection type.



Cable Modem

Your Internet Service Provider may have given you a host name. If so, enter it into the field.

Enter or clone the MAC address of your modem for identifying your hardware to your ISP.

Click Finish to complete the setup. The Status page will open to allow you to view the connection status, as well as other information. See "Status" for details.



Fixed-IP xDSL

Some xDSL Internet Service Providers may assign a fixed (static) IP address. If you have been provided with this information, choose this option and enter the assigned IP address, gateway IP address, DNS IP addresses, and subnet mask. Click FINISH to complete the setup.



PPPoE xDSL

Enter the PPPoE User Name and Password assigned by your Service Provider. The Service Name is normally optional, but may be required by some service providers.

Leave the Maximum Transmission Unit (MTU) at the default value unless you have a particular reason to change it.

Enter a Maximum Idle Time (in minutes) to define a maximum period of time for which the Internet connection is maintained during inactivity. If the connection is inactive for longer than the Maximum Idle Time, it will be dropped. (Default: 10)

Enable the Auto-reconnect option to automatically re-establish the connection as soon as you attempt to access the Internet again. Click FINISH to complete the setup.



PPTP (Point-to-Point Tunneling Protocol)

Point-to-Point Tunneling Protocol is a common connection method used for xDSL connections in Europe. It can be used to join different physical networks using the Internet as an intermediary.

If you have been provided with the information as shown on the screen, enter the assigned IP address, subnet mask, default gateway IP address, user ID and password, and PPTP Gateway.

The MTU (Maximum Transmission Unit) governs the maximum size of the data packets. Leave this on the default value (1460) unless you have a particular reason to change it.

Enter a Maximum Idle Time (in minutes) to define a maximum period of time for which the Internet connection is maintained during inactivity. If the connection is inactive for longer than the Maximum Idle Time, it will be dropped. (Default: 0)

Enable the Auto-reconnect option to automatically re-establish the connection as soon as you attempt to access the Internet again.



Click FINISH to complete the setup.

	Advanced Setup
	Use the web management interface to define system parameters, manage and control the Wireless Base Station 11g and its ports, or monitor network conditions. The following table outlines the selections available from this program.
Menu System	Description Sets the local time zone, the password for administrator access, and the IP address of a PC that will be allowed to manage the Wireless Base Station 11g remotely.
Internet Settings	 Specifies the Internet connection type: Dynamic IP host configuration and the physical MAC address of each media interface PPPoE configuration PPTP Static IP and ISP gateway address Specifies DNS servers to use for domain name resolution.
Local network	Sets the TCP/IP configuration of the Wireless Base Station's Local Network interface and all DHCP clients.
Wireless	Configures the radio frequency, Network Name (SSID), and encryption for wireless communications.
NAT	Shares a single ISP account with multiple users, sets up virtual servers.
Firewall	Configures a variety of security and specialized functions, including: Access Control, Intrusion Detection, and DMZ.
DDNS	Dynamic DNS provides users on the Internet with a method to tie their domain name(s) to computers or servers.
Tools	Contains options to backup & restore the current configuration, restore all configuration settings to the factory defaults, upgrade system firmware, or reset the system.
Status	Provides Internet connection type and status, firmware and hardware version numbers, system IP settings, as well as DHCP, NAT, and Firewall information. Displays the number of attached clients, the firmware versions, the physical MAC address for each media interface, and the hardware version and serial number: Shows the security and DHCP client log.

System Time Zone



Select your time zone and time server from the drop-down list for the Wireless Base Station 11g. This information is used for log entries and client access control.

Password Settings



Use this menu to restrict access based on a password. By default, there is no password. For security you should assign one before exposing the Wireless Base Station 11g to the Internet.

Passwords can contain from 3-12 alphanumeric characters and are not case sensitive.

If your password is lost, or you cannot gain access to the user interface, press the Reset button (holding it down for at least five seconds) to restore the factory defaults. (The default is no password.)

Enter a maximum Idle Time Out (in minutes) to define a maximum period of time for which the login session is maintained during inactivity. If the connection is inactive for longer than the maximum idle time, it will perform system logout, and you have to login to the web management system again. (Default: 9 minutes)

Note:

Remote Management



Remote Management allows a remote PC to configure, manage, and monitor the Wireless Base Station 11g using a standard web browser. Check Enable and enter the IP address of the remote host. Click APPLY.

If you specify 0.0.0.0 as this IP address, any host can manage the Wireless Base Station 11g.

Internet Settings

Specify the Internet connection type provided by your Internet Service Provider, then click More Configuration to enter detailed configuration parameters for the selected connection type.

Dynamic IP



The Host Name is optional, but may be required by some ISPs. The default MAC address is set to the Internet's physical interface on the Wireless Base Station 11g. Use this address when registering for Internet service, and do not change it unless required by your ISP. If your ISP used the MAC address of an Ethernet card as an identifier when first setting up your broadband account, only connect the PC with the registered MAC address to the Wireless Base Station 11g and click the Clone MAC Address button. This will replace the current Wireless Base Station MAC address with the already registered Ethernet card MAC address. If you are unsure of which PC was originally set up by the broadband technician, call your ISP and request that they register a new MAC address for your account. Register the default MAC address of the Wireless Base Station 11g.

Note:

PHILIPS Wireless Base Station Apply Cancel

Point-to-Point Over Ethernet (PPPoE)

Enter the PPPoE User Name and Password assigned by your Service Provider. The Service Name is normally optional, but may be required by some service providers.

The MTU (Maximum Transmission Unit) governs the maximum size of the data packets. Leave this on the default value (1492) unless you have a particular reason to change it.

Enter a Maximum Idle Time (in minutes) to define a maximum period of time for which the Internet connection is maintained during inactivity. If the connection is inactive for longer than the Maximum Idle Time, it will be dropped. (Default: 10 minutes)

Enable the Auto-reconnect option to automatically re-establish the connection as soon as you attempt to access the Internet again.



Point-to-Point Tunneling Protocol (PPTP)

Point-to-Point Tunneling Protocol (PPTP) can be used to join different physical networks using the Internet as an intermediary. Using the above screen allows client PCs to establish a normal PPTP session and provides hassle-free configuration of the PPTP client on each client PC.

Enter the assigned IP address, subnet mask and default gateway IP address (usually supplied by your ISP), and then the PPTP User ID, Password and PPPTP Gateway IP address.

The MTU (Maximum Transmission Unit) governs the maximum size of the

data packets. Leave this on the default value (1460) unless you have a particular reason to change it.

Enter a maximum Idle Time Out (in minutes) to define a maximum period of time for which the PPTP connection is maintained during inactivity. If the connection is inactive for longer than the Maximum Idle Time, it will be dropped. (Default: 0 minutes)

Enable the Auto-reconnect option to automatically re-establish the connection as soon as you attempt to access the Internet again.

Static IP



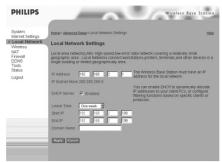
If your Internet Service Provider has assigned a fixed IP address, enter the assigned address and subnet mask for the Wireless Base Station 11g, then enter the gateway address of your ISP.

DNS



Domain Name Servers map numerical IP addresses to the equivalent domain name (e.g., www.philips.com). Your ISP should provide the IP address of one or more domain name servers. Enter those addresses in this screen.

Local netwerk - LAN



- Local Network IP Use the Local Network menu to configure the Local Network IP address for the Wireless Base Station 11g and to enable the DHCP server for dynamic client address allocation.
- Lease Time Set a period for the lease time if required. For home networks this may be set to Forever, which means there is no time limit on the IP address lease.
- IP Address Pool A dynamic IP start address may be specified, e.g. 192.168.2.100 (default value). Once this start IP address has been assigned, IP addresses running from 192.168.2.100 to 192.168.2.199 will be part of the dynamic IP address pool. IP addresses from 192.168.2.2 to 192.168.2.99, and 192.168.2.200 to 192.168.2.254 will be available as static IP addresses.

Remember not to include the address of the Wireless Base Station 11g in the client address pool. Also remember to configure your client PCs for dynamic IP address allocation.

Wireless

To configure the Wireless Base Station 11g as a wireless access point for wireless clients (either stationary or roaming), all you need to do is define the radio channel, the Network Name (or Service Set identifier/SSID) (Default: philips), and encryption options.

Channel and SSID



You must specify a common radio channel and Network Name (SSID) to be used by the Wireless Base Station 11g and all of your wireless clients. Be sure you configure all of your clients to the same values. Network name (SSID). This should be set to the same value as other wireless devices in your network. (Default: philips.)

The Network Name (SSID) is case sensitive and can consist of up to 32 alphanumeric characters.

Transmission Rate: Set the data rate transmitted from the Wireless Base Station 11g. The lower the data rate, the longer the transmission distance. (Default: Fully Automatic.)

Basic Rate: The highest rate specified is the rate the Wireless Base Station 11g will use when transmitting broadcast/multicast and management frames. (Default: All.)

Channel: The radio channel through which the Wireless Base Station 11g communicates with PCs in its service range. (Default: Auto).

The available channel settings are limited by local regulations.

Broadcast Network Name: Broadcasting the SSID on the wireless network for easy connection with client PCs. (Default: Enable)

Note:

Note:

Encryption

If you are transmitting sensitive data across wireless channels, you should enable Wired Equivalent Privacy (WEP) and/or WiFi Protected Access (WPA) encryption. Encryption requires you to use the same set of encryption/decryption keys for the Wireless Base Station 11g and all of your wireless clients. You can choose between standard 64-bit or the more robust 128-bit encryption.



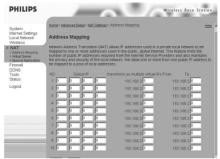
You may automatically generate encryption keys or manually enter the keys. For automatic 64-bit security, enter a passphrase and click Generate. Four keys will be generated (as shown below). Choose a key from the drop-down list or accept the default key. Automatic 128-bit security generates a single key.

If you use encryption, configure the same keys used for the Wireless Base Station 11g on each of your wireless clients. Note that the encryption protects data transmitted between wireless nodes, but does not protect any transmissions over your wired network or over the Internet.

Network Address Translation (NAT)

From this section you can configure the Address Mapping, Virtual Server, and Special Application features that provide control over the port openings in the Wireless Base Station's firewall. This section can be used to support several Internet based applications such as VPN

Address Mapping



Allows one or more public IP addresses to be shared by multiple internal users. Enter the Public IP address you wish to share into the Global IP field. Enter a range of internal IPs that will share the global IP.

Virtual Server



If you configure the Wireless Base Station 11g as a virtual server, remote users accessing services such as web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP addresses. In other words, depending on the requested service (TCP/UDP port number), the Wireless Base Station 11g redirects the external service request to the appropriate server (located at another internal IP address).

For example, if you set Public Port to TCP/80 (HTTP or web) and the Private IP/Port to 192.168.2.2/80, then all HTTP requests from outside users will be transferred to 192.168.2.2 on port 80. Therefore, by just

entering the IP Address provided by the ISP, Internet users can access the service they need at the local address to which you redirect them. The more common TCP service ports include: HTTP: 80, FTP: 21, Telnet: 23, and POP3: 110

Special Applications

Some applications, such as Internet gaming, videoconferencing, Internet telephony and others, require multiple connections. These applications cannot work with Network Address Translation (NAT) enabled. If you need to run applications that require multiple connections, use the following screen to specify the additional public ports to be opened for each application.



Specify the public port number normally associated with an application in the Trigger Port field. Set the protocol type to TCP or UDP, then enter the ports that the application requires.

Special application connections can also be achieved by selecting the application type and item number in the Popular applications field, and clicking the Copy to button to easily specify the port numbers. Then set the protocol type to TCP or UDP.

Example:

ID	Trigger Port	Trigger Type	Public Port	Public Type	Comment
1	6112	UDP	6112	UDP	Battle.net
2	28800	TCP	2300-2400,	TCP	MSN Game
			47624		Zone

For a full list of ports and the services that run on them, see www.iana.org/assignments/port-numbers.



The Wireless Base Station 11g firewall can provide access control of connected client PCs, block common hacker attacks, including IP Spoofing, Land Attack, Ping of Death, IP with zero length, Smurf Attack, UDP port loopback, Snork Attack, TCP null scan, and TCP SYN flooding. The firewall does not significantly affect system performance, so we advise leaving it enabled to protect your network users.

Access Control



Using this option allows you to specify different privileges based on IP address for the client PCs.

Note:

Click on Add PC and define the appropriate settings for client PC services (as shown in the following screen).



PHILIPS Wireless Base Station MAC Filter

MAC Filtering Table

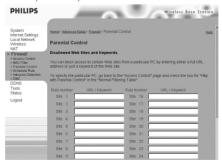
The MAC Filtering feature of the Wireless Base Station 11g allows you to control access to your network to up to 32 clients based on the MAC (Media Access Control) address of the client machine. This ID is unique to each network adapter. If the MAC address is listed in the table, that client machine will have access to the network.

Parental Control

To configure the Parental Control feature, use the table below to specify the web sites (www.somesite.com) and/or keywords you want to filter on your

To complete this configuration, you will need to create or modify an access rule in "Access Control". To modify an existing rule, click the Edit option next to the rule you want to modify. To create a new rule, click on the Add PC option.

From the Access Control Add PC section check the option for WWW with Parental Control in the Client PC Service table to filter out the web sites and keywords specified below.



Use the above screen to block access to web sites or to web URLs containing the keyword specified in the table.containing the keyword specified in the table.

Schedule Rule

The Schedule Rule feature allows you to configure specific rules based on Time and Date. These rules can then be used to configure more specific Access Control.



Enables Schedule-based Internet access control.

- 1. Click Add Schedule Rule.
- 2. Define the settings for the schedule rule (as shown on the following screen).
- 3. Click OK and then click the APPLY button to save your settings.



Use this section to create your network schedule rules.

The times you set below are the times periods that you want the Access Control Rule to be active. For example, if you want to block Internet access (block WWW) from 9AM to 9PM during the week, simply configure 9:00 AM as "Start Time" and 9:00 PM as "End Time" for each weekday. During that time period the user will be unable to access the internet.

Once the schedule rule is set up, you will need to configure or edit an Access Control rule, and select the Schedule Rule that you want to apply to that Access Control rule. You can set the schedule rule at the bottom of the Access Control Configuration page in the "Scheduling Rule" drop-down option.

Intrusion Detection



Firewall Configuration

- SPI (Stateful Packet Inspection) and Anti-DoS firewall protection The Wireless Base Station's Intrusion Detection feature limits access for incoming traffic at the Internet port. When the SPI feature is turned on, all incoming packets will be blocked.
- Discard Ping from INTERNET Prevents any response to ping commands on the Wireless Base Station's Internet port.

E-Mail Alert Configuration

• When hackers attempt to enter your network, we can alert you by e-mail – Enter your E-mail address. Specify your SMTP and POP3 servers, user name, and password.

34 ENGLISH

DMZ (Demilitarized Zone)



If you have a client PC that cannot run an Internet application properly from behind the firewall, then you can open the client up to unrestricted two-way Internet access. Enter the IP address of a DMZ host to this screen. Adding a client to the DMZ may expose your local network to a variety of security risks, so only use this option as a last resort.



DDNS (Dynamic DNS - Settings)

Domain Name is a series of alphanumeric strings separated by periods that maps to the address of a network connection and identifies the owner of the address.

Dynamic DNS provides users on the Internet with a method to tie their domain name to a computer or server. DDNS allows your domain name to follow your IP address automatically by having your DNS records changed when your IP address changes.

The Server Configuration section automatically opens the TCP port options checked in the Virtual Server section. Simply enter in the IP Address of your server, such as a web server, and then click on the port option HTTP Port 80 so users can access your web server from the Internet connection.

This DNS feature is powered by a DDNS service provider. With a DDNS connection you can host your own web site, email server, FTP site, and more at your own location even if you have a dynamic IP address. (Default: Disable)

Tools

Use the Tools menu to backup the current configuration, restore a previously saved configuration, restore factory settings, update firmware, and reset the Wireless Base Station.

Tools - Configuration Tools



- Backup Saves the Wireless Base Station's configuration to a file.
- Restore Restores settings from a saved backup configuration file.
- Restore to factory defaults Restores the Wireless Base Station settings back to the factory defaults.

Tools - Firmware Upgrade



Use this screen to update the firmware or user interface to the latest versions. Download the upgrade file from the Philips web site (www.philips.com/support) and save it to your hard drive. In the Upgrade Target field, choose Firmware. Then click Browse to look for the previously downloaded file. Click APPLY. Check the Status page Information section to confirm that the upgrade process was successful.

Tools - Reboot



Click APPLY to reboot the Wireless Base Station. The reboot will be complete when the power LED stops blinking.

Note:

If you use the Reset button on the Wireless Base Station it will perform a power reset. If the button is held depressed for over five seconds, all the LEDs will illuminate and the factory settings will be restored.

Status

The Status screen displays Internet/Local Network connection status, firmware, and hardware version numbers, illegal attempts to access your network, as well as information on DHCP clients connected to your network.



The following items are included on this screen:

Section	Description
---------	-------------

INTERNET Displays Internet connection type and status.

Wireless Base Station Displays system IP settings, as well as DHCP, Firewall, UPnP and Wireless status.

INFORMATION Displays the number of attached clients, the firmware versions, the physical

MAC address for each media interface, as well as the hardware version and

serial number.

Security Log Displays illegal attempts to access your network.

Save Click on this button to save the security log file.

Clear Click on this button to delete the security log.

Refresh Click on this button to refresh the screen.

DHCP Client Log Displays information on all DHCP clients on your network.

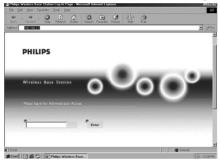
How to secure the Wireless Base Station 11g?

The next pages will show you how to secure the Philips Wireless Base Station 11g in two ways:

- 1. choosing a password for restricting access to the Wireless Base Station's configuration menu.
- 2. setting an encryption for your wireless network.

Philips strongly recommends that you secure your Wireless Base Station 11g as described in this chapter.

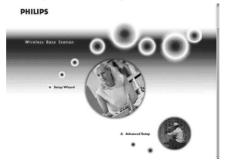
1 - Choosing a password for restricting access to the Wireless Base Station's configuration menu.



Go to configuration menu of the Wireless Base Station 11g by entering its IP address (default 192.168.2.1 into the Address Bar of your Internet browser program).

Click 'Enter' to continue.

Enter a password first if you have set one in the 'System | Password Settings'



Enlarge the window of your browser program. (E.g., press the F11 key for Internet Explorer.)

Click on the text "Advanced Setup".

Note:





Click 'System'.



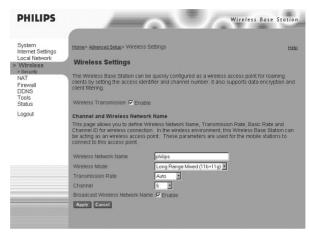
Click 'Password Settings'.



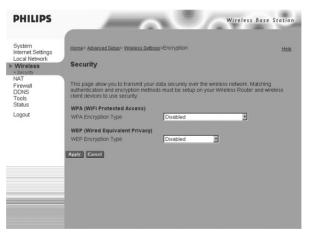
Enter (and re-enter) a new password to restrict login access to your Wireless Base Station 11g.

Click 'Apply' to continue.

2 - Setting an encryption for your wireless network.

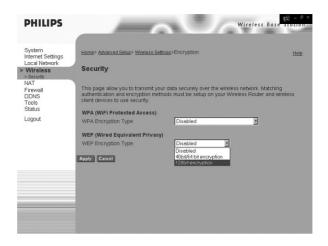


Click 'Wireless'.



Click 'Security' to continue.

Please, do not change any of the other wireless settings at this time.



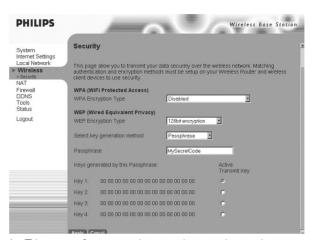
Choose the security mode that you want to use. In this example, click 'WEP'.



Select the encryption strength you want to use (e.g. 128-bit WEP), and enter a passphrase that will be hard to guess.

Important:

- 1. You need to make a difference between upper case and lower case characters. I.e.: "SecretCode" is not the same as "secretcode".
- 2. 'Passphrase' is not the same as ASCII input.
- 3. Always use exactly the same key settings on all wireless devices.



- 1. Take note of your passphrase and encryption settings.
- 2. Click 'Generate' to transform your passphrase into an encryption key.
- 3. Click 'Apply' to start using the encryption.

Configure all your other wireless devices to match the encryption settings of the Wireless Base Station 11g.

You will now lose the connection with the Wireless Base Station 11g if you connected to it wirelessly. Re-connect after adapting the encryption settings of your wireless network adapter:

- 1 If you have forgotten your encryption settings, you will need to re-enter new encryption settings for all of your wireless network devices. If you cannot connect to the Wireless Base Station 11g anymore, please read "How to reset the Wireless Base Station 11g to its default settings?"
- 2 If you have forgotten your password for the configuration menu, you will need to reset the Wireless Base Station 11g in order to remove the password setting. Go to "How to reset the Wireless Base Station 11g to its default settings?"

Important:

Note:

Note:

How to reset the Wireless Base Station 11g to its default settings?

The next pages will show you how to reset the Philips Wireless Base Station 11g.



Take an object with a pointed end and push it firmly into the hole marked 'Reset' on the back of the Wireless Base Station 11g.



Observe the 'power', 'wireless', and 'modem' LEDs on the front of the Wireless Base Station 11g lighting up constantly while keeping the reset button pressed for at least five seconds.



Release the reset button and observe the LEDs on the front of the Wireless Base Station 11g.

After about five seconds, the 'power' LED should blink several times before the Base Station re-starts.

If it did not blink first, please repeat the reset procedure.

After resetting, the default Wireless Base Station settings will be:

Wireless network name (SSID): philips Wireless channel: Wireless encryption: disabled 192.168.2.1 IP Address for configuration: You will need to run the Setup program on the CD again.

How to set-up a computer network?

The next pages will show you an example of how to set-up a computer network using the Philips Wireless Base Station 11g.

Warning:

The Wireless Base Station 11g only establishes a connection between your wireless network devices. How you use this connection is up to you.

Setting-up a computer network is to be seen as an independent application that requires networking software from other manufacturers. For example, the networking software that has been incorporated in the Windows Operating System by Microsoft.

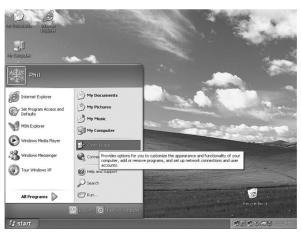
Therefore, the description below is to be seen as an example only.

WHAT IS YOUR WINDOWS VERSION?

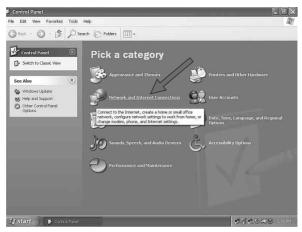
- 1. Start setting-up your network with the computer that has the latest operating system. The order of preference being: Windows XP, Windows 2000, Windows Me, and finally Windows 98SE.
- 2. Use its Networking Setup Wizard and allow it to make a networking setup diskette.
- 3. With this diskette, set-up your remaining computers.

For Windows XP and Windows 2000.

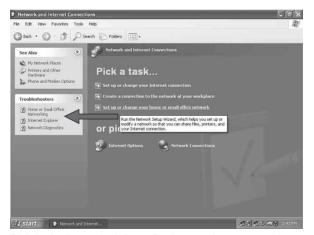
See further on in this chapter for Windows Me and Windows 98SE.



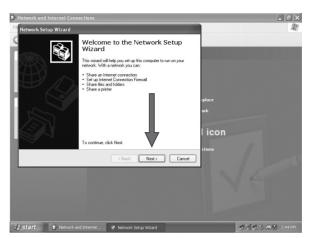
Click the Windows Start button, and click "Control Panel" from the list.



Double-click the "Network and Internet connections" icon.



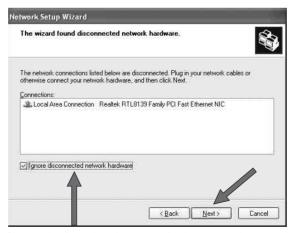
Click in the list to the left on "Setting-up a home network or small business network".



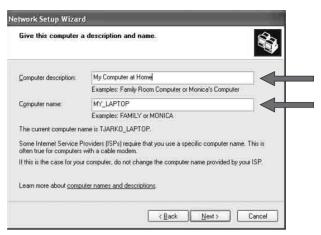
The Wizard Network Setup appears. Click 'Next' to continue.

Wizard Network Settings

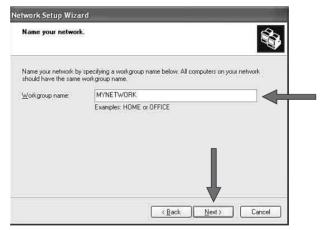
- Please, carefully read the instructions the Wizard gives you, and adapt your choices to the type of network you want to set-up. Use the Help feature within the Wizard if you need more information while using the Wizard.
- 2. In each window, click 'Next' to go to the next step.
- 3. Below, we will describe some of the crucial steps of this Wizard.



Place a check mark to ignore any broken network connections before clicking 'Next' to continue.



- 1. Enter a description that helps you recognize the computer.
- 2. Enter a name that is different for each computer.
- 3. Click 'Next' to continue.



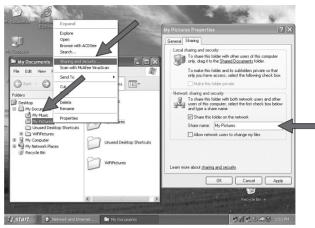
Enter the same workgroup name for all computers in the network, then click 'Next' to continue.



Choose to make a networking setup disk. Then click 'Next'.



Click 'Finish' to close the Wizard, and then use the disk you made to set-up your other computers.



To share folders with the network: Start Windows Explorer and right-click the folder you wish to share with the network. Click the 'Sharing' tab and adapt the settings.

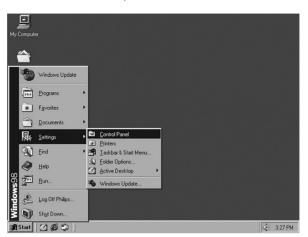


To explore the network: Double-click the Network Environment icon on the desktop.

If you need more information, consult Windows Help.

For Windows 98SE and Windows Me.

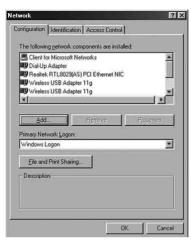
See earlier on in this chapter for Windows XP and Windows 2000.



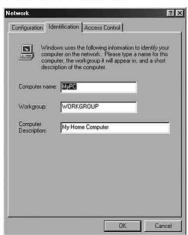
Click the Windows Start button, click "Settings", and click "Control Panel" from the list.



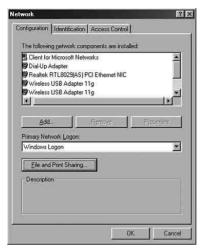
Double-click the "Network" icon.



Click the 'Identification' tab.



- 1. Enter a name that is different for each computer.
- 2. Enter the same workgroup name for all computers in the network.
- 3. Enter a description that helps you recognize the computer.
- 4. Click on the 'Configuration' tab to continue.



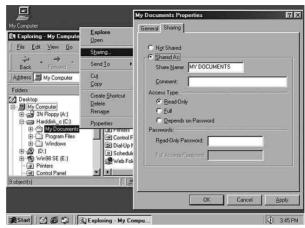
Click the 'Sharing files and printers' button.



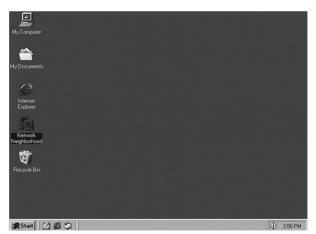
Select the access options you want, and click 'OK' to continue.



Click 'OK' to accept the changes.



To share folders with the network: Start Windows Explorer and right-click the folder you wish to share with the network. Click the 'Sharing' tab and adapt the settings.



To explore the network: Double-click the Network Environment icon on the desktop.

If you need more information, consult Windows Help.

Troubleshooting

The information outlined in this section describes some useful steps for getting your computer and the Wireless Base Station 11g online.

A. Verify your connection to the Wireless Base Station 11g

If you are unable to access the Wireless Base Station's web-based administration pages then you may not be properly connected or configured. The screen shots in this section were taken on a Windows 2000 machine, but the same steps will apply to Windows 95/98/Me/XP.

To determine your TCP/IP configuration status please follow the steps helow:

- 1. Click Start then choose Run.
- 2. Type cmd or command to open a DOS prompt.
- 3. In the DOS window, type ipconfig and verify the information that is displayed.
- 4. If your computer is setup for DHCP, then your TCP/IP configuration should be similar to the information displayed:
 - IP Address: 192.168.2.X (x is number between 100 and 199)
 - Subnet: 255,255,255.0
 - Gateway: 192.168.2.1

If you have any other IP address information listed see below. If you have an IP address that starts with 169.254.XXX.XXX then see the next section.

If you have another IP address configured, then see section C.

B. I am getting an IP Address that starts with 169.254.XXX.XXX

If you are getting this IP Address, then you need to check that you are properly connected to the Wireless Base Station 11g.

Confirm that you have a good link light on the Wireless Base Station 11g for the corresponding port. If not, please try another cable.

If you have a good link light, please open up a DOS window as described in the previous section and type ipconfig/renew.

If you are still unable to get an IP Address from the Wireless Base Station 11g, reinstall your network adapter. Please refer to your adapter manual for information on how to do this.

C. I have another IP Address displayed

If you have another IP address listed then the PC may not be configured for a DHCP connection. Please refer to "Configuring Client TCP/IP" for information.

Once you have confirmed your computer is configured for DHCP, then please follow the steps below.

- 1. Open a DOS window as described above.
- 2. Type ipconfig/release.
- 3. Then type ipconfig/renew.

D. The 10/100 LED does not light after a connection is made.

- 1. Check that the host computer and the Wireless Base Station 11g are both powered on.
- 2. Be sure the network cable is connected to both devices.
- 3. Verify that Category 5 cable is used if you are operating at 100 Mbps.
- 4. Verify that the length of any cable does not exceed 100 m (328 ft).
- 5. Check the network card connections.
- 6. The RI-45 port on the Wireless Base Station 11g, network card, or cable may be defective.

E. Browser Configuration

Confirm your browser is configured for a direct connection to the Internet using the Ethernet cable that is attached to the computer. This is configured through the options/preference section of your browser.

RF Frequency

	Specifications			
	Below is an outline of the technical specifications for the Philips Wireless Base Station			
Standards	IEEE802.11gIEEE 802.3 10BASE-T EthernetIEEE 802.3u 100BASE-TX Fast Ethernet			
Data Rate	• Auto Fallback: 54/48/36/24/18/12/11/9/6/5.5/2/1''			
Security	Wired Equivalent Privacy (WEP) 64/128-Bit			
Media Access Control	CSMA/CA with ACK			
Operating Range	• Indoor: Up to 150 meters Outdoors: Up to 400 meters			
Internet Sharing Methods	Static IPDynamic IPPPPoE			
Protocols	 TCP/IP PPTP/L2TP/IPSec Pass-through (VPN) DNS SNTP NAT DHCP HTTP HTML PPP Internet Control Protocol PPP Authentication Protocol Point-to-Point Protocol 			
LED Indicators	Power/StatusWireless ActivityModem ActivityLocal Network Activity			
Interface	 4 x 10/100 Base-T RJ-45 Local Network Port with Automatic MDI/MDIX feature) 1 x 10/100 Base-T RJ-45 Broadband Internet port 			
RF Specification	Emission TypeDirect Sequence Spread Spectrum (DSSS)			

• 2400MHz – 2483.5MHz – Europe

Operating Channel

• 13 Channels (Europe)

RF Output Power

• 16-18 dBm

Sensitivity

• 11Mbps PBCC - 85 dBm • 11Mbps CCK – 82 dBm

Data modulation

• BPSK (1Mbps) • QPSK (2Mpbs)

type

• CCK (5.5/11Mbps)

• PBCC (5.5/11/22 Mbps)

Antenna Type

• Dual Dipole Antenna with Diversity

Antenna Gain

• 2 dBi (Typically).

RF Power Consumption • Under 600 mA

Guarantuee certificate Garantiebewijs Certificado de garantia Garantibevis Certificat de garantie Certificado de garantia Εγγύηση Garantibevis Garantieschein Certificato di garanzia Garanticertifikat Takuutodistus



year warranty année garantie Jahr Garantie jaar garantie año garantia anno garanzia χρόνσς εγγύηση år garanti år garanti år garanti vuosi takuu año garantia

Туре:	CPWBS054		
Serial n	r:		

Date of purchase – Date de la vente – Verkauísdatum – Aankoopdatum – Fecha de compra – Date d'acquisito – Data da adquirição – Ημερομηνία αγοράς – Inköpsdatum – Anskaffelsesdato – Kjøpedato – Oatopäivä

Dealer's name, address and signature Nom, adresse et signature du revendeur Name, Anschrift und Unterschrift des Händlers Naam, adres en handtekening v.d. handelaar Nombre, direccion y firma del distribudor Nome, indirizzo e firma del fornitore Ονοματεπώνμο, διεύθυνση και υπογραφή του εμπ. προμηθευτη Återförsäljarens namn, adress och signatur Forhandlerens navn, adresse og unterskrift Forhandlerens navn, adresse og unterskrift Jälleenmyyjän nimi, osoite ja allekirjoitus Nome, morada e assinature da loja

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